REMARKS

Claims 1-44 are pending in the application. By this amendment, claim 44 is added. No new matter is presented by this amendment. Reconsideration and allowance in view of the foregoing amendments and following remarks are respectfully requested.

A. The Filing Date

As noted in the November 9, 2004 Amendment, the Office Actions reflect a filing date of February 14, 2001. In accordance with the Decision on Petition mailed July 25, 2001, the present application is accorded a filing date of October 31, 2000. Applicant requests that the records at the U.S. Patent and Trademark Office be corrected to reflect such filing date.

B. The Rejection of Claims 1, 13, 16-18, 20 and 30

The Office Action rejects claims 1, 13, 16-18, 20 and 30 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,112,249 to Bader et al. (Bader). This rejection is respectfully traversed.

Claim I recites a network, comprising a primary network controller; and a plurality of network devices, wherein each network device is connected to the primary network controller by a respective primary network path; and at least one predetermined primary backup network path connecting each network device with the primary network controller, wherein each predetermined primary backup network path is blocked by the network controller when a corresponding primary network path is active; wherein, when a primary network path between a network device and the primary network controller fails, the

primary network controller blocks the failed primary network path and switches to one of the predetermined primary backup network paths.

The teachings of Bader were discussed in the November 9, 2004 Amendment. Bader is directed to a method and system of non-disruptively rerouting network communications from a secondary network path to a primary path. In the Abstract, Bader describes methods, systems and computer program products for the reassignment of communications sessions to a primary network communications path from a secondary network communications path are provided, which detect the availability of the primary network communications path and reroute existing transferable communications sessions to the primary network communications path from the secondary network communications path.

The Office Action references various teachings of Bader in asserting that Bader teaches the claimed invention of claim 1. In particular, the Office Action asserts that Bader teaches wherein each predetermined primary backup network path is blocked by the network controller when a corresponding primary network path is active (lines 50-57 of column 7); and wherein, when a primary network path between a network device and the primary network controller fails, the primary network controller blocks the failed primary network path and switches to one of the predetermined primary backup network paths lines 50-57 of column 7 and blocks 22, 24 and 26 of Fig. 3). These assertions in particular are traversed.

Bader (lines 50-57 of column 7) teaches that upon a failure along the primary communications path (block 22), the network control hardware/software typically will attempt to reactivate the primary communications path one or more times. If these reactivation attempts are

unsuccessful, the network control hardware/software then may activate the secondary network communications path (block 24).

It is respectfully submitted that such teaching of Bader teaches away from the features of claim 1. That is, claim 1 recites at least one predetermined primary backup network path connecting each network device with the primary network controller, wherein each predetermined primary backup network path is blocked by the network controller when a corresponding primary network path is active; wherein, when a primary network path between a network device and the primary network controller fails, the primary network controller blocks the failed primary network path and switches to one of the predetermined primary backup network paths.

Bader teaches that in the event of a failure along the primary network communication path, the network control hardware/software attempts to reactivate the primary communications path one or more times, if unsuccessful, the network control then may activate a secondary network communication path. This teaching of Bader is fundamentally different than the claimed features, reciting that the claimed invention *blocks* the secondary network path when the primary network path is active, and in the event of failure of the primary network path, the primary network controller *blocks* the failed primary network path and switches to a secondary network path.

That is, it appears that the Office Action is interpreting the activation and the reactivation, as described by Bader, as somehow teaching the claimed features relating to blocking the secondary network path, i.e., the claimed backup path, and blocking the failed primary network

path. Applicant respectfully submits that such interpretation is unsupportable. Bader's activation/reactivation is fundamentally different than the claimed blocking. In short, the Office Action's interpretation essentially leaves claim 1's recitations relating to the blocking meaningless.

Applicant further notes that Bader describes in column 8, lines 5-11, that once the secondary path is activated, the network controller periodically checks the status of the primary network communications path, to determine if that path has been reactivated (block 30). Bader further describes that unless the primary path has been reactivated, the network control hardware/software continues to assign all new communications sessions to the secondary network communications path. This teaching of Bader also fails to suggest the features recited in claim 1 including blocking the predetermined primary backup network path and blocking the failed primary network path.

Accordingly, it is respectfully submitted that claim 1 defines patentable subject matter for the reasons set forth above, as well as for the reasons set forth below in response to the "Response to Arguments" set forth in the Office Action. Further, it is submitted that claim 20 defines patentable subject matter for reasons similar to those set forth with respect to claim 1.

Further, dependent claims 13, 16-18 and 30 define parentable subject matter based on their various dependencies on independent claims 1 and 20, as well as the additional features such dependent claims recite. Withdrawal of the rejection under 35 U.S.C. §102 is respectfully requested.

Applicant's Comments on the "Response to Arguments"

On pages 20-21, the Office Action sets forth a Response to Applicant's Arguments. Such assertions set forth in the Office Action are respectfully traversed.

As asserted in the Office Action, Bader discloses: "Upon a failure along the primary communications path (block 22), the network control hardware/software typically will attempt to reactivate the primary communications path one or more times (not shown in FIG. 3); if these reactivation attempts are unsuccessful, the network control hardware/software then may activate the secondary network communications path (block 24)," (lines 50-57 of column 7), and the fact that the secondary network communications path is activated indicates that it was previously inactive (i.e. blocked). The Office Action asserts this aspect is also shown in Fig. 3; and that Bader adds: "As will be recognized by those of skill in the art, such a reassignment may be implemented in any number of ways, including setting the "cost" associated with the secondary communications path to a level lower than the cost associated with the primary network communications path or by removing the primary network communications path as an option in the database of available paths," (line 65 of column 7 through line 5 of column 8).

The Office Action further asserts that removing the primary network communications path as an option in the database of available paths is a way of blocking the failed primary path, and that both citations and Fig. 3 wholly disclose blocking the failed primary network path and switching to a secondary network path. The assertions on pages 20-21 of the Office Action are respectfully traversed.

Applicant submits that Bader's teachings regarding activation of a network communications path simply does not teach the recited "blocking features", as set forth in claim 1. In particular, claim 1 recites "wherein, when a primary network path between a network device and the primary network controller fails, the primary network controller blocks the failed primary network path and switches to one of the predetermined primary backup network paths." As recited in the last clause of claim 1, such language sets out a specific action of "blocking" vis-à-vis the primary network path, i.e., the failed primary network path, as well as vis-à-vis a failure of the primary network path. Bader simply does not teach such action vis-à-vis the primary communication path of Bader.

To explain further, in column 8 of Bader (as referenced in the Office Action), Bader teaches, for example, that "once the secondary path is activated, the network controller periodically checks the status of the primary network communications path, to determine if that path has been reactivated (block 30); and that unless the primary path has been reactivated, the network control hardware/software continues to assign all new communications sessions to the secondary network communications path.

Thus, Bader teaches checking to see if the primary network path has been reactivated. This in no way teaches the last clause of claim 1 in which the primary network path is blocked by the primary network controller. Thus, at the least, Bader fails to teach the claimed invention vis-à-vis the primary network path.

The Office Action asserts that "removing the primary network communications path as an option in the database of available paths is a way of blocking the failed primary

path." Applicant submits that Bader simply does not disclose that the primary path is blocked. Illustratively, Applicant submits that Bader does not teach un-blocking the primary path. Rather, Bader teaches that once the secondary path is activated, the network controller periodically checks the status of the primary network communications path, to determine if that path has been reactivated (block 30). No teaching is present that the primary path of Bader is blocked, rather the primary path is checked. Applicant does note that Bader teaches in column 10, lines 2-14, regarding deactivation of the secondary path. However, such action is vis-à-vis the secondary path and not the primary path. Further, Bader describes that removing the primary network communications path as an option in the database of available paths may be used to effect a reassignment to the secondary path. However, such "removing the primary network communications path as an option" is simply different than the claimed blocking of the primary network path. In short, Bader fails to teach or suggest the claimed features in particular vis-à-vis the primary network path.

Applicant respectfully submits that for the reasons set forth above, claim 1 recites patentable subject matter, as well as claims 20, 33 and 38.

Applicant notes that claim 44 has been added regarding further aspects of the blocking feature.

C. The Rejection of Claims 2, 21, 33-36 and 38-41

The Office Action rejects claims 2, 21, 33-36 and 38-41 under 35 U.S.C. 103(a) as unpatentable over Bader in view of U.S. Patent 3,920,975 to Bass. This rejection is respectfully traversed.

Bass is directed to a remote test and control system for use with a data communications network having primary and back-up facilities that provide full network testing and switching capability, as described in the Abstract of Bass. In particular with respect to independent claims 33 and 38, the Office Action asserts that Bader teaches all of the features of the claimed invention except Bader fails to teach the step of monitoring the status of the primary network path. The Office Action attempts to cure the deficiencies of Bader with the teachings of Bass.

Specifically, the Office Action asserts that Bass teaches a "remote test and control system of the invention provides remote testing and switching capability for a data communications network having primary and backup facilities through a network controller," (lines 30-33 of column 3). The Office Action asserts that the one of ordinary skill would have recognized that it is quite advantages for the network controller in Bader to periodically test a condition of the backup network paths.

However, it is respectfully submitted that even if it were obvious to somehow combine the teachings of Bader and Bass so as to provide Bader with Bass' capabilities relating to periodic testing, such combination would still fail to teach or suggest the invention of independent claims 33 and 38. That is, Bader fails to teach the claimed features relating to "each predetermined primary backup network path is blocked by the network controller when a corresponding

primary network path is active" and "when a primary network path between a network device and the primary network controller fails, the primary network controller blocks the failed primary network path and switches to one of the predetermined primary backup network paths."

Accordingly, it is respectfully submitted that the applied art, either alone or in combination, fails to teach or suggest the features as set forth in claims 33 and 38, as well as claims 1 and 20. Thus, dependent claims 2, 21, 34-36, and 39-41 define patentable subject matter based on their various dependencies on such independent claims, as well as the additional features such dependent claims recite. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

D. The Rejection of Claim 3

The Office Action rejects claim 3 under 35 U.S.C. 103(a) as unpatentable over Bader in view of U.S. Patent 5,452,115 to Tomioka. This rejection is respectfully traversed.

Tomioka is directed to a data communications network remote test and control system having a primary and back-up facilities that provide full network testing and switching.

In particular, Tomioka teaches a communication system comprises a wavelength multiplexing network having a plurality of transmission channels of different wavelengths, a plurality of nodes interconnected by the wavelength multiplexing network for performing data communications with other nodes using time slots into which time on each of the transmission channels is divided, each of the nodes having its transmitting wavelength fixed and unique to a node and its

receiving wavelength set tunable, and a network controller for centrally controlling time slot allocation repeated for each frame to the nodes, as described in the Abstract.

Specifically, the Office Action asserts that Bader teaches all of the features of the claimed invention except for a secondary network controller that takes over control of the network if the primary network controller fails, wherein each network device is connected to the secondary network controller by a respective secondary network path; at least one predetermined secondary backup network path connecting each network device with the secondary network controller, wherein each predetermined secondary backup network path is blocked by the network controller when a corresponding secondary network path is active; and wherein, when a secondary network path between a network device and the secondary network controller fails, the secondary network controller blocks the inoperable secondary network path and switches to one of the predetermined secondary backup network paths. The Office Action further asserts that Tomioka discloses: "if, as shown in FIG. 21, there is provided a backup network controller 9, switching may be made to the backup network controller 9," (lines 51-53 of column 16).

The Office Action then proposes to combine the teachings of Bader with the features of Tomioka. In particular, the Office Action proposes to modify Bader with the backup network controller of Tomioka.

However, it is respectfully submitted that even if it were obvious to somehow combine the teachings of Bader and Tomioka, and to otherwise modify Bader as proposed in the Office Action, such modification of Bader would still fail to teach or suggest the invention of claim 1,

as discussed above. That is, the disclosure of Tomioka and the asserted modification of Bader, as proposed in the Office Action, fail to cure the deficiencies noted above with respect to claim 1.

Accordingly, it is respectfully submitted that the applied art, either alone or in combination, fails to teach or suggest the features as set forth in claim 3. Thus, dependent claim 3 defines patentable subject matter based on its dependency on independent claim 1, as well as the additional features the claim recites. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

E. The Rejection of Claim 4

The Office Action rejects claim 4 under 35 U.S.C. 103(a) as unpatentable over Bader in view of Tomioka, and further in view of Bass. This rejection is respectfully traversed.

The teachings of Tomioka and Bass, as well as Bader, have been discussed above. It is respectfully submitted that the applied art to Bader, Tomioka and Bass, either alone or in combination, fails to teach or suggest the features as set forth in claim 4. Thus, dependent claim 4 defines patentable subject matter based on its dependency on independent claim 1, as well as the additional features the claim recites. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

F. The Rejection of Claims 5-7, 9-11, 14, 15, 22-24, 26-28, 31 and 32

The Office Action rejects claims 5-7, 9-11, 14, 15, 22-24, 26-28, 31 and 32 under 35 U.S.C. 103(a) as unparentable over Bader in view of U.S. Patent 6,373,838 to Law et al. (Law). This rejection is respectfully traversed.

Law teaches a Dial Access Stack Architecture (DASA) that includes a stack of Network Access Servers (NASs) each independently establishing and processing information for communication links on a public telephone network. A primary interconnect couples the stack of network access servers together through a primary network. A routing engine is coupled through the primary interconnect to the stack of network access servers routing packets between the network access servers and an Internet network. A secondary interconnect couples the stack of network access servers together through a secondary network that operates independently of the primary interconnect.

Law further describes that the primary or secondary interconnects each allow pairs of the network access servers to communicate with each other in parallel and independently of the routing engine. The DASA provides scalability and resiliency to fault conditions and can easily aggregate and integrate any new access media. Applications such as voice, video and multicasting can be seamlessly added. The DASA architecture can scale from hundreds to thousands of ports at optimal cost and performance while avoiding any single point of failure (Abstract).

In the Office Action, Law is relied upon for various particulars including connection specifics and cable properties, for example. It is respectfully submitted that even if it were obvious to somehow modify Bader as proposed in the Office Action (for example as proposed in paragraph (d) of the Office Action) with regard to the connection specifics and cable properties, such modification of Bader would fail to cure the deficiencies of Bader, as described above.

Accordingly, Applicant submits that the applied art of Bader and Law, either alone or in combination, fails to teach or suggest the features as set forth in claims 1 and 20. Thus, dependent claims 5-7, 9-11, 14, 15, 22-24, 26-28, 31 and 32 define patentable subject matter based on their dependency on independent claims 1 and 20, as well as the additional features such dependent claims recite. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

G. The Rejection of Claims 8, 12, 25 and 29

The Office Action rejects claims 8, 12, 25 and 29 under 35 U.S.C. 103(a) as unpatentable over Bader in view of Law, and further in view of U.S. Patent 5,521,958 to Selig et al. (Selig).

This rejection is respectfully traversed.

Selig is directed to a telecommunication test system. In particular, as described in the Abstract, Selig teaches that a telecommunication test system for a line to be tested includes a test measurement device coupling with the line. The test measurement device determines parameter measurement data from the line. A processor receives the parameter measurement data. Selig further teaches that a first communication path between the test measurement device and the processor transmits the parameter measurement data. As referenced in the Office Action, Selig teaches the first communication path is a wireless path.

Selig further describes a mobile facility communicates with the processor. The communications are via a second communication path which includes a primary wireless path and a back-up wireline path. A central office and a data test place various signals on the line being tested. A third communication path between the mobile facility and at least one of the

central office and the data test center is provided. The third communication path includes a primary wireless path and a back-up wireline path.

In short, Selig is relied upon in the Office Action for features relating to Selig's wireless connection. It is respectfully submitted that even if Bader, as modified by Law, were somehow modified to utilize Selig's wireless connection, such combination would fail to cure the deficiencies of Bader as discussed above.

It is respectfully submitted that the applied art of Bader, Law and Selig, either alone or in combination, fails to teach or suggest the features as set forth in claims 1 and 20. Thus, dependent claims 8, 12, 25 and 29 define patentable subject matter based on their dependency on independent claims 1 and 20, as well as the additional features the claims recite. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

H. The Rejection of Claim 19

The Office Action rejects claim 19 under 35 U.S.C. 103(a) as unpatentable over Bader in view of U.S. Patent 5,864,284 to Sanderson. This rejection is respectfully traversed.

Sanderson relates to coupling radio frequency signals. In particular, Sanderson teaches a coupling system for transferring an RF signal to and from a high-voltage cable of a power distribution system. The coupling system uses a lightning arrester as an element for coupling a RF signal from a RF modem to and from the high-voltage cable. An impedance element of the coupling system is a section of a grounding cable modified with one or more ferrite cores as a means for adjusting the value of the impedance. As referenced and relied upon in the Office

Action, Sanderson teaches aspects of a power network or a power grid in column 3, lines 46-49. However, it is submitted that Sanderson fails to cure the deficiencies of Bader, as discussed above.

Accordingly, it is respectfully submitted that the applied art of Bader and Sanderson, either alone or in combination, fails to teach or suggest the features as set forth in claim 1. Thus, dependent claim 19 defines patentable subject matter based on its dependency on independent claim 1, as well as the additional features the claim recites. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

I. The Rejection of Claims 37, 42 and 43

In the Office Action, claims 37, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unparentable over Bader in view of Bass, and further in view of Law. This rejection is respectfully traversed.

The teachings of Bader, Bass and Law have been discussed above. It is respectfully submitted that such applied art to Bader, Law and Bass, either alone or in combination, fails to teach or suggest the features as set forth in claims 33 and 38 for the reasons set forth above. That is, neither Law nor Bass cure the deficiencies as discussed above with respect to Bader. Thus, dependent claims 37, 42 and 43 define patentable subject matter based on their dependency on independent claims 33 and 38, as well as the additional features such dependent claims recite. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested

J. Conclusion

For at least the reasons outlined above, Applicant respectfully asserts that the application is in condition for allowance. Favorable reconsideration and allowance of the claims are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

For any fees due in connection with filing this Response the Commissioner is hereby authorized to charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted, HUNTON & WILLIAMS

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